(19) JAPANESE GOVERNMENT PATENT OFFICE

(11) Publication number: **05062911 A**

PATENT ABSTRACTS OF JAPAN

(21) Application number: **03223234**

(51) Intl. Cl.: **H01L 21/205** H01S 3/18

(22) Application date: **04.09.91**

(30) Priority:

(43) Date of application publication: **12.03.93**

(84) Designated contracting states:

(71) Applicant: **FUJITSU LTD**

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(74) Representative:

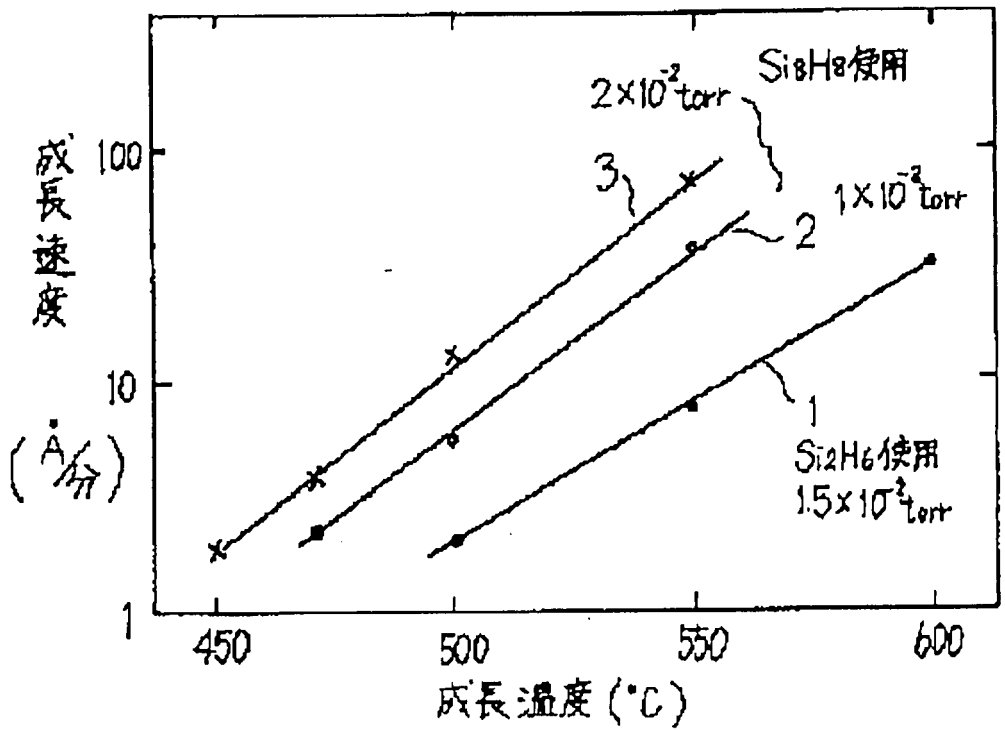
(54) MANUFACTURE OF SEMICONDUCTOR SUPERLATTICE

(57) Abstract:

PURPOSE: To form a Ge layer and an Si layer or a Ge-Si layer and an Si layer on an Si substrate, and also to put a hetero-epitaxial growth method, in which excellent crystal quality and high growth speed can be obtained, into practical use.

CONSTITUTION: The title semiconductor superlattice

manufacturing method is the method with which a Ge layer and an Si layer or Ge-Si layer and an Si layer are epitaxially grown on an Si substrate by conducting a depressed CVD method under the atmosphere containing oxidizing impurity gas of 1000ppb or lower using GeH4 and trisilane (Si3H8) as raw gas and also using H2 or inert gas as carrier gas.


Si8H8使用
2×10⁻²torr
1×10⁻²torr
Si2H6使用
1.5×10⁻²torr
3
2
1
成長速度
(Å/分)
100
10
1
450
500
550
600
成長温度(°C)